

REMARKS/ARGUMENTS

Claims 1-33 and 35 remain pending. Claims 1, 3, 8, 18, 28 and 35 have been amended. No new claims have been added. Support for the amended claims can be found throughout the specification, the drawings and the original claims. No new matter is believed added.

Claim 3 was objected to because of informalities. Claims 1 and 2 were rejected under 35 U.S.C. 103(a) as being anticipated by Leibzay (US Patent No. 5,602,841) in view of Lo (US Patent No. 6,785,236) and Turner (US Patent No. 6,907,041). Claims 3-5 were rejected under 35 U.S.C. 103(a) as being anticipated by Leibzay in view of Lo, Turner and Patrick (US Patent Publication No. 2005/0175014). Claims 6 and 7 were rejected under 35 U.S.C. 103(a) as being anticipated by Leibzay in view of Lo, Turner and Fishman (US Patent No. 6,084,869). Claims 8-9, 15, 18-19, 25, 28, and 30 were rejected under 35 U.S.C. 103(a) as being anticipated by Park (US Patent No. 6,430,187) in view of Lo. Claims 10-11 and 20-21 were rejected under 35 U.S.C. 103(a) as being anticipated by Park in view of Lo and Yoshikawa (US Patent No. 6,532,234). Claims 12 and 22 were rejected under 35 U.S.C. 103(a) as being anticipated by Park in view of Lo, Yoshikawa and Fishman. Claims 13-14, 16-17, 23-24, 26-27, 29, and 31-33 were rejected under 35 U.S.C. 103(a) as being anticipated by Park in view of Lo and Patrick. Claim 35 was rejected under 35 U.S.C. 103(a) as being anticipated by Leibzay in view of Lo and Soumiya (US Patent No. 5,818,818).

Objection to Claim 3

Claim 3 was objected to because of informalities. Claim 3 has been amended to overcome the objection, and Applicants assert that as amended claim 3 is in correct form.

Rejection of Claims 1-7

First, as an initial matter, clarification is requested with respect to the rejection of claim 4. The Examiner states that claim 4 is rendered obvious by Leibzay in view of Lo and further in view of Patrick (see O.A. page 5). However, it does not appear that the specific citations provided by the Examiner exist in any of these references. In addition, reference is

made to "Mahalingaiah" but the details of this reference are not provided. Thus, Applicants respectfully request clarification as to the reference the Examiner is citing in the rejection of claim 4.

Next, with regard to the rejection of claims 1-7, independent claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay in view of Lo and Turner. Applicants respectfully traverse this rejection and assert that the combination of Lebizay, Lo and Turner fails to disclose or suggest every limitation of claim 1 as amended. Specifically, Applicants have amended claim 1 as follows:

1. A method of allocating memory buffer space for traffic of network connections, the method comprising:

designating fixed buffer allocation space, wherein buffers in the fixed buffer allocation space are associated with fixed buffer allocation queue identifications, and wherein the fixed buffer allocation space is associated with a first discard scheme which determines if the traffic will be accepted into the buffers;

designating prioritized fair share buffer space, wherein buffers in the prioritized fair share buffer space are associated with prioritized fair share queue identifications, wherein none of the buffer space is actually allocated to the fixed buffer allocation space, and all of the buffer space is actually allocated to the prioritized fair share buffer space, and wherein the prioritized fair share buffer space is associated with a second discard scheme which determines if the traffic will be accepted into the buffers, the second discard scheme being different than the first discard scheme; and

discarding a portion of lowest priority traffic based on the first discard scheme or the second discard scheme, the first or second discard scheme determined based on the fixed buffer allocation queue identification or the prioritized fair share queue identification associated with the lowest priority traffic. (Underline added).

Applicants respectfully assert that Lebizay, Lo and Turner do not disclose all the limitations of claim 1. First, Lebizay discloses a packet routing system that discards packets when errors are detected (see column 7 lines 50-52) and when a lack of resources is detected (see column 16 lines 12-14). However, Lebizay does not disclose the following features of claim 1 as amended: 1) that "fixed buffer allocation space is associated with a first discard scheme", 2) that "prioritized fair share buffer space is associated with a second discard scheme", or 3) "discarding

a portion of lowest priority traffic based on the first discard scheme or the second discard scheme". Next, Lo discloses a method of scheduling the transmission of information between a descriptor queue and a transmission buffer, where the scheduler does not discard any portion of the information but merely takes information from the "high priority queue first if that queue is not empty" and transfers it to the transmission buffer (see column 6 lines 30-31). However, the scheduler of Lo does not disclose "a first discard scheme which determines if the traffic will be accepted into the buffers" (underline added). Last, Turner is related to methods of resequencing streams of information and does not disclose any discard schemes. Therefore, Applicants respectfully assert that Lebizay, Lo and Turner do not disclose all of the limitations of amended claim 1. Claim 1 and its dependent claims 2-7 distinguish over Lebizay, Lo and Turner for at least the above reasons, and Applicants respectfully request withdrawal of the rejection of these claims under 35 U.S.C. 103(a).

Rejection of Claims 8-17

Independent claim 8 was rejected under 35 U.S.C. 103(a) as being unpatentable over Park in view of Lo. This rejection is respectfully traversed. The Examiner suggests that Lo discloses that "the prioritized fair share buffer space is associated with a second discard scheme" (see O.A. pages 8-9). The specific reference cited by the Examiner in Lo describes that "descriptors contained in a high priority queue are dequeued ahead of descriptors contained in a low priority queue" (see column 5 lines 9-12). As explained above, Lo merely discloses a method of scheduling the transmission of information between a descriptor queue and a transmission buffer (see column 5 lines 6-15), and the scheduler of Lo does not discard any portion of the information in the descriptor queue when determining which information to transfer (see column 6 lines 30-31). More over, claim 8 has been amended to recite "a second discard scheme which determines if the traffic will be accepted into the buffer" (Underline added). This feature is not disclosed by the scheduler of Lo, and Park fails to make up for the deficiencies of Lo with respect to this claim limitation. Park discloses discarding lower priority frames (see column 1 lines 57-59); however, Park does not disclose a "second discard scheme being different than the first discard scheme" as claimed. Thus, even if combined, Park and Lo

do not disclose all of the limitations of claim 8. Amended claim 8 and its dependent claims 9-17 are distinguishable over Park and Lo at least for the above reason, and Applicants respectfully request withdrawal of the rejection of these claims under 35 U.S.C. 103(a).

Rejection of Claims 18-33 and 35

Applicants have amended independent claims 18 and 28 in a manner comparable to the amendments made to claim 8, and Applicants respectfully assert that claims 18 and 28 are allowable for at least the same reason as discussed above with respect to claim 8. Applicants further assert that claims 19-27 and 29-33, which depend from claims 18 and 28, are patentable for at least the same reason.

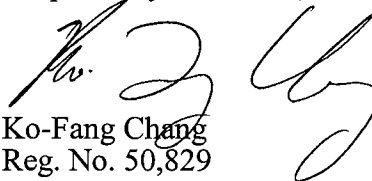
Applicants have amended claim 35 in a manner comparable to the amendments made to claim 1, and Applicants respectfully assert that claim 35 is allowable for at least the same reason as discussed above with respect to claim 1.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance. The issuance of a formal Notice of Allowance at an early date is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


Ko-Fang Chang
Reg. No. 50,829

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, Eighth Floor
San Francisco, California 94111-3834
Tel: 650-326-2400 Fax: 415-576-0300
KFC:djb

60820008 v1